



RMIT UNIVERSITY

Programming 1 (COSC 2231)

ASSIGNMENT 1

Cover Sheet

HAND OUT DATE: 22 AUGUST 2011

HAND IN DATE: 5 SEPTEMBER 2011

WEIGHTAGE: 5%

INTAKE: JULY 2011

Instructions to student:

- This is an individual assignment.
- Complete this cover sheet and attach it to your assignment – this should be your first page!

Student declaration:	
<i>I declare that:</i> <ul style="list-style-type: none">▪ <i>I understand what is meant by plagiarism</i>▪ <i>The implication of plagiarism have been explained to me by our lecturer</i> <i>This assignment is my own work.</i>	
Name	Student ID

Assignment 1 - Covers materials from chapters 1 to 3

Program Description

1. Write a program that calculates and prints the bill for a cellular telephone company. The company offers 2 types of service: regular and premium. Rates vary based on the type of service and are computed as follows:

Regular service: \$10.00 plus first 50 minutes are free. Charges for over 50 minutes are \$0.20 per minute.

Premium service: \$25.00 plus:

- a) For calls made from 6.00am to 6.00pm, the first 75 minutes are free; charges for over 75 minutes are \$0.10 per minute.
- b) For calls made from 6.00pm to 6.00am, the first 100 minutes are free; charges for over 100 minutes are \$0.05 per minute.

Input / Output

Your program should prompt the user to enter an account number, a service code (type char), and the number of minutes the service was used. A service code of r or R means regular service; a service code of p or P means premium service. Treat any other character as an error. Your program should output the account number, type of service, number of minutes the telephone service was used, and the amount due from the user. For the premium service, the customer may be using the service during the day and the night. Therefore, to calculate the bill, you must ask the user to input the number of minutes the service was used during the day and the number of minutes the service was used during the night.

Sample input/output (user-entered input is shown in **bold**)

Enter the account number: **DG456677889**

Enter the service type: (r or R) for regular (p or P) for premium service: **p**

Enter the day time minutes used: **34**

Enter the night time minutes used: **27**

Account Number: DG456677889

Service Type: Premium

Minutes Service Used (Day): 34

Minutes Service Used (Night): 27

Amount Due: \$25.00

What to Submit:

Submit printed copies of your Java source code, together with sample runs of your program. Your sample runs should show that the program works for different values of input. Make sure the submission includes a cover page which shows your name, student ID and assignment name, and all submission should be properly stapled or bound.

Make sure you follow proper coding style as discussed in class. Make sure you use proper names for your variables. Make sure you indent the code appropriately. Comment the code where appropriate.

When to Submit:

The deadline for the assignment is 4 pm Monday, 5 September 2011.
Submit to Mr Sanath pigeon box.